USING THE DUAL DIAGNOSIS CAPABILITY OF ADDICTION TREATMENT (DDCAT) INDEX TO IMPROVE OUTCOMES: AN EVALUATION OF A COMMUNITY-BASED BEHAVIORAL HEALTH PROGRAM

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A DNP project submitted to the faculty at the University of North Carolina at Chapel Hill in partial fulfillment of the requirements for the degree of Doctorate in Nursing Practice in the Department of Nursing in the School of Nursing.

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ABSTRACT

Valerie B. Idada-Parker: Using the Dual Diagnosis Capability of Addiction Treatment (DDCAT) Index to Improve Outcomes: An Evaluation of a Community-Based Behavioral Health Program (Under the direction of Dr. Cheryl Giscombe)

Agencies that provide services to individuals with coexisting mental health and substance abuse disorders (dual diagnosis) require guidance to understand their capability for comprehensively implementing integrated care to achieve optimal treatment outcomes. The Dual Diagnosis Capability of Addiction Treatment (DDCAT) index was created by researchers with funding from SAMHSA to address this need. The project was completed in a community-based outpatient behavioral center. It aimed to use the DDCAT index to evaluate a community-based agency that provides substance abuse and mental health services to determine its capability of providing integrated care to the clients who are dually-diagnosed. The project identified areas where the agency was well equipped to serve these clients, and determined where programmatic improvement was needed. Methods used for collecting data included observation, interviews and review of documents.

The investigator found that clinical process: treatment and continuity of care were the DDCAT domains that required the most improvement for endorsement for dual diagnosis capability, while staff training and program structure was the lowest priority. Overall the staff acknowledged the usefulness of the evaluation. The staff was confident that they could follow the DDCAT index recommendations and improve their scores. The study concluded that the

DDCAT index is a valuable tool to use to guide agencies to understand their capability for integrated care to achieve optimal treatment outcomes. Mental health and addiction treatment programs can enhance dual diagnosis capable services by implementing recommendations using the DDCAT index.

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

DDCAT	The Dual Diagnosis Capability of Addiction Treatment index
SAMSHA	Substance Abuse and Mental Health Services Administration
CBHA	Community-based behavioral health agency
DSM-IV-TR	Diagnostic and Statistical Manual of Mental Disorders IV-TR
NSDUH	The National Survey on Drug Use and Health
SUD	Substance use disorder
NIDA	National Institute of Drug Abuse
NIMH	National Institute of Mental Health
AOS	Alcoholism Addiction only services
DDC	Dual Diagnosis Capable
DDE	Dual Diagnosis Enhanced
ASAM	American Society of Addiction Medicine
TTM	Theoretical framework of the Trans Theoretical Model of Behavior Change
HIV	Human Immunodeficiency Virus
AIDS	Acquired Immunodeficiency Syndrome
DWI	Driving while impaired
AA	Alcohol Anonymous
NA	Non Alcohol Anonymous
PMHNP	Psychiatry Mental Health Nurse Practitioner
LCSW	Licensed Clinical Social Worker
SACOT	Substance Abuse Comprehensive Outpatient Treatment
CARF	Commission on Accreditation of Rehabilitation Facilities
DHHS	Department of Health and Human Services certification
CSAC	Certified peer support specialists

CHAPTER 1: INTRODUCTION

The Substance Abuse and Mental Health Services Administration (SAMSHA) has emphasized the importance of integrated care for individuals who suffer from dual diagnosis, which is the co-existence of mental health and substance abuse conditions. It is critical to understand the relative strengths and weaknesses of programs or agencies treating dually diagnosed individuals in order to guide efforts to improve services. Agencies that provide services to these individuals require guidance to understand their capability for comprehensively implementing integrated care to achieve optimal treatment outcomes. The Dual Diagnosis Capability of Addiction Treatment (DDCAT) index was created by researchers with funding from SAMHSA to address this need. Dual diagnosis programs that follow the guidelines of SAMSHA and offer integrated services are more likely to produce desired treatment outcomes such as: reduced hospitalization, medication compliance, lower relapse rates and control of psychiatric symptoms (Torrey, et al. 2002).

The current project aimed to use the DDCAT to evaluate a community-based behavioral health agency (CBHA), CAARE, Inc., that provides substance abuse and mental health services to determine its capability of providing integrated care to the clients who are dually-diagnosed. The project identified areas where the agency is well equipped to serve these clients, and determined where programmatic improvement is needed. Written and oral feedback was provided to the agency staff to facilitate the provision of fully integrated services.

Background and Significance

Dual diagnosis was first identified in the 1980s, and it is currently defined as co-occurring substance related and mental health disorders (SAMHSA, 2006). The existence of both disorders within individuals often results in poor treatment response and increased morbidity, particularly when either the mental illness or the substance abuse disorder goes untreated (SAMSHA, 2002).

Figure 1 illustrates the definition of dual diagnosis, which occurs when a substance related disorder and mental disorder co-exist.

Figure 1: Overlap of Mood and Addictive Disorders

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Substance dependence and substance abuse are defined according to criteria listed in the Diagnostic and Statistical Manual of Mental Disorders IV-TR (DSM-IV-TR) as meeting criteria for illicit drug or alcohol dependence or abuse. The criterion for each disorder is listed below.

DSM-IV-TR Criteria for Substance Dependence

A maladaptive pattern of substance use, leading to clinically significant impairment or distress, as manifested by three (or more) of the following, occurring at any time in the same 12-month period:

1. tolerance, as defined by either of the following:

   a. a need for markedly increased amounts of the substance to achieve intoxication or desired effect

   b. markedly diminished effect with continued use of the same amount of the substance
2. withdrawal, as manifested by either of the following:

   a. the characteristic withdrawal syndrome for the substance

   b. the same (or a closely related) substance is taken to relieve or avoid withdrawal symptoms
3. the substance is often taken in larger amounts or over a longer period than was intended
4. there is a persistent desire or [there are] unsuccessful efforts to cut down or control substance use
5. a great deal of time is spent in activities necessary to obtain the substance (e.g., visiting multiple doctors or driving long distances), use the substance (e.g., chain smoking), or recover from its effects
6. important social, occupational, or recreational activities are given up or reduced because of substance use

7. the substance use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance (e.g., current cocaine use despite recognition of cocaine-induced depression, or continued drinking despite recognition that an ulcer was made worse by alcohol consumption).

DSM-IV-TR Criteria for Substance Abuse

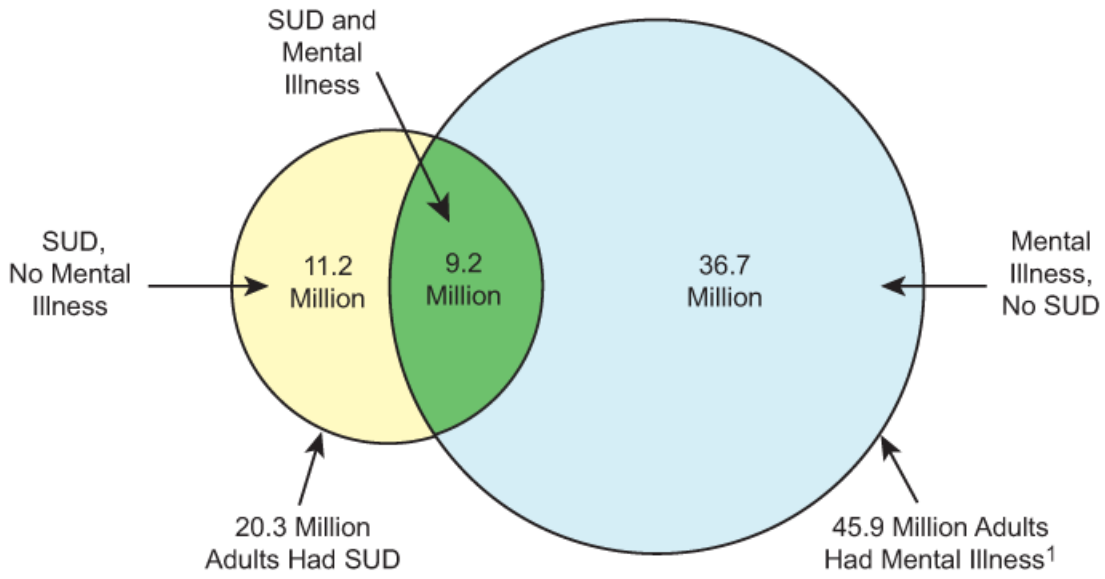
A. A maladaptive pattern of substance use leading to clinically significant impairment or distress, as manifested by one (or more) of the following, occurring within a 12-month period:

1. recurrent substance use resulting in a failure to fulfill major role obligations at work, school, or home (e.g., repeated absences or poor work performance related to substance use; substance-related absences, suspensions, or expulsions from school; neglect of children or household)
2. recurrent substance use in situations in which it is physically hazardous (e.g., driving an automobile or operating a machine when impaired by substance use)
3. recurrent substance-related legal problems (e.g., arrests for substance-related disorderly conduct)
4. continued substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance (e.g., arguments with spouse about consequences of intoxication, physical fights)

B. The symptoms have never met the criteria for substance dependence for this class of substance[1].

In America over 24 million individuals have reported severe psychological disorders and 21.3 percent of this population have active substance abuse/dependence disorders (NSDUH, 2006). The National Survey on Drug Use and Health estimated 2.7 million adults over the age of 18 reported that they had a major depressive episode and alcohol use disorder in 2006, with 40.7 percent not receiving treatment for either disorder (NSDUH, 2007). In figure 2 below SAMHSA reported that in 2014, 9. 2 million people in the USA had substance use disorder (SUD) and mental Illness, 11.2 had substance abuse without a mental illness diagnosis, while 36.7 million individuals had mental illness without substance abuse diagnosis (SAMHSA.gov, 2014)

Figure 2. Individuals with mental illness, mental illness and substance abuse in the U.S.



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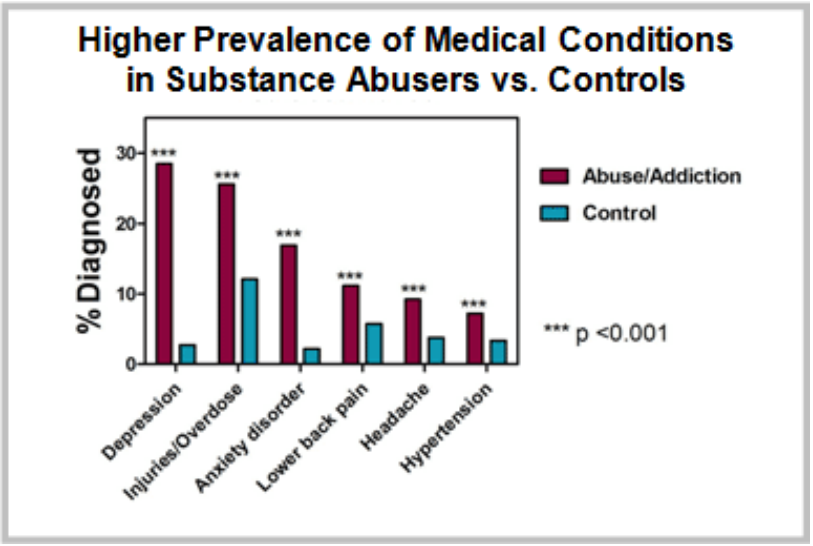
[1] Reprinted from the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision. Copyright 2013. American Psychiatric Association.

Substance abuse treatment costs the American society over one half-trillion dollars annually and apart from the budgetary cost of substance use, the societal cost of substance use, abuse, and dependence is one of the leading causes of harmful and destructive behaviors (NIDA, 2009). The overwhelming societal and budgetary cost of substance use, abuse and dependence has resulted in a driving need to create programs to prevent substance abuse, addiction and relapse. In order to provide better treatment outcomes there is also need to improve the effectiveness of programs that provide services for patients with dual diagnosis.

Dual diagnosed patients have more illnesses and consequences from substance abuse in comparison to individuals diagnosed with only mental illness, like depression or schizophrenia. Illnesses and consequences that arise in this population include inpatient psychiatric hospitalization, increase in aggressive and violent behaviors, medication noncompliance, and greater exacerbation of psychiatric symptoms (Bogenschutz, 2013). -Dually diagnosed individuals are also at a higher risk for co-morbid illnesses, substance abuse relapse, suicidal ideation, violence, incarceration, homelessness, HIV infection, and increased familial problems (Drake, et al., 1998). Table 1 below shows a higher prevalence of medical conditions in substance abusers versus a control group (SAMSHA, 2005)

Table 1: Prevalence of Medical Condition in Substance Abusers vs. Controls



Individuals with dual diagnosis are often complex to treat, often requiring intense treatment (SAMSHA, 2005). There are currently no diagnostic criteria for dual diagnosis in the DSM-IV-TR. (DSM, 2013). Due to the complexity of treating dual diagnosis it would be helpful for providers to have a standardized diagnostic criterion for this diagnosis for clinicians to adequately diagnose and treat this population.

The treatment of dually diagnosed patients from the 1980s to the mid-2000s consisted of treating solely the mental health disorder or the substance abuse disorder. That treatment resulted in low success rates, which prompted the National Institute of Mental Health (NIMH), National Institute of Drug Abuse (NIDA), National Institute on Alcohol Abuse, and Alcoholism (NIAAA) to provide recommendations concerning integration of treatment for this population (Drake, et al., 1998). Integration of treatment is concurrent delivery of mental health and substance abuse treatment at the same time (SAMSHA, 2005).

Table 2. Rates of Treatment by Type (Mental Health, Substance Abuse) and by Severity Level of the Disorder (NCS-R)			
Level of Substance Abuse Disorder	Type of Treatment	Level of Mental Disorder	
		12-month serious mental illness	12-month other mental illness
12-month substance dependence	Neither MH nor SA	29%	71%
	MH only	49%	25%
	SA only	3%	1%
	Both MH and SA	19%	4%
12-month substance abuse	Neither MH nor SA	51%	78%
	MH only	49%	19%
	SA only	0%	0%
	Both MH and SA	0%	3%

(SAMHSA, 2002)

Table 2 above provides valuable information about data that resulted in the creation of DDCAT index for the treatment for individuals with dual diagnosis. The 2002 data shows that among individuals with 12-month substance dependence, those with both substance dependence and serious mental illnesses, only 19 percent of those with serious mental illness received treatment for both disorders; 29 percent did not receive treatment for either problem. If treatment was received at all, it most often was for the mental disorder alone (49 percent). The pattern was similar for individuals with other (not serious) mental illnesses. Disturbingly, among the individuals with substance abuse, the focus of treatment is mental health (49% of those with serious mental illness and 19% of those with other mental illness) instead of integrated care or even substance abuse treatment alone. This table demonstrates the need to utilize evidence-based models in the appropriate treatment of patients with dual diagnosis.

The Substance Abuse Mental Health Service Administration (SAMHSA) reports that the provision of integrated mental health services to patients with dual diagnosis in all settings has been recognized by Congress as an expectation, rather than an exception (SAMHSA, 2002). Research conducted with different mental health populations, including adults with severe and persistent mental illness, teens, and families that have been referred by the criminal justice and legal system, provide evidence for the benefits of combination, coordination and integration of single treatment strategies into treatment strategies that address dual diagnosis to improve treatment outcomes (Mueser, et al., 2003).

The Dual Diagnosis Capability in Addiction Treatment (DDCAT) Index was developed to help agencies assess capability/readiness for dual diagnosis treatment due to the increasing recognition of the limitations of existing service settings. It was developed specifically for addiction treatment service settings. Prior to the development of the DDCAT index, addiction treatment services for the dually diagnosed utilized a mixture of evidence-based practices and consensus clinical guidelines to guide their practice. The DDCAT is the only objective measure available to guide the process of treatment integration to enhance treatment outcomes.

The development of DDCAT was sponsored by SAMHSA and was designed to eliminate many of the disadvantages of traditional sequential and parallel treatment (SAMHSA, 2005). Mueser and colleagues (2003) have outlined several disadvantages of sequential treatment including the following: when there is an untreated disorder, the treated disorder worsens; it is impossible to stabilize one disorder without attending to the other; there is a lack of agreement to which disorder should be treated first,, it is unclear when one disorder has been "successfully treated" so that treatment of the other disorder can commence, sequential treatment is negatively associated with referral of the client for further treatment (Mueser, et al., 2003). Parallel

treatment also has several disadvantages. When providers follow the parallel treatment paradigm, mental health and substance abuse treatments are not integrated into a cohesive treatment package. Treatment providers fail to communicate, the burden of integration falls on the client, and funding and eligibility issues create barriers to treatment. In addition, in parallel treatment, different treatment providers may have incompatible treatment philosophies and lack a common language and treatment methodology; clients may be more likely to slip between the cracks and receive no services due to failure of either treatment provider to accept final responsibility for the client (Mueser, et al., 2003).

CHAPTER 2: DESCRIPTION OF THE DDCAT INDEX

The DDCAT Index is a benchmark instrument developed in 2003 by psychiatrist, Dr. Mark McGovern, to evaluate the capability of an addiction treatment program to provide services for dual diagnosis patients. He developed the DDCAT in response to a report released to Congress in 2002 on the "Prevention and treatment of Co-occurring Substance Abuse Disorders and Mental Disorders" (SAMSHA, 2002). The report addressed recent research that noted the effectiveness of integrated treatment and the presence of evidence based treatment practices that needed to be implemented in programs for effective treatment outcomes. The DDCAT was developed to enhance treatment outcomes in substance abuse and addiction programs. In addition, addiction treatment agency providers requested for specific guidance on ways to create or enhance integrated services for their programs.

The DDCAT is an objective tool which has rated scales following a site visit that includes semi-structured interviews with staff at all levels, review of program documents, client charts, and observation of the milieu and setting. It provides specific suggestions and examples from the field on how to reach Dual Diagnosis Capable (DDC) level services which means that the program is capable at a dual diagnosis level and is capable of treating individuals with mental health disorders that are stable. Likewise, programs already assessed at the DDC level have asked for specific guidance on how to attain the Dual Diagnosis Enhanced (DDE) level which refers to the program being capable to treat individuals with acute and unstable mental health disorders.

The DDCAT index is based upon a fidelity/adherence assessment methodology. This methodology is a valid method used to measure a program's adherence to and competence in the delivery of recommended evidence-based practices (Mueser, et al., 2003). The need for fidelity scales to effectively measure these integrated treatment programs is essential for clients, families of clients, investors, treatment providers and government organizations in order to determine what modalities of treatment are most effective for this population and which evidence based programs and practices yield the most positive treatment outcomes. Psychometric properties and indices of inter-rater reliability, internal consistency, convergent and discriminate validity, preliminary criterion validity, and sensitivity to change support the use of the DDCAT (DDCAT, 2011).

The index was initially field-tested in Connecticut, Louisiana, and New Hampshire before its implementation in various other states, Native American tribes, and internationally. There was a revision of the DDCAT items and scoring anchors in 2006 and 2011. The updated version will be used in the evaluation of the community based substance abuse agency.

Table 3: Domains and Elements of DDCAT index.

Domain	Elements
Program Structure	IA. Mission Statement
	IB. Organizational certification & licensure.
	IC. Coordination and collaboration with mental health services
	ID. Financial incentives.
Program Milieu	IIA. Routine expectation of and welcome to treatment for both disorders.
	IIB. Display and distribution of literature and patient educational materials,
Assessment	IIIA. Routine screening methods for psychiatric symptoms,
	IIIB. Routine assessment if screened positive for psychiatric symptoms,
	IIIC. Mental Health and Substance Use diagnosis
	IIID. Mental Health and Substance Use History Reflected in Record
	IIIE. Program Acceptance Based on Psychiatric Symptom Acuity
	IIIF. Program Acceptance Based on Severity of Persistence and Disability
	IIIG. Stage-Wise Assessment

Treatment	IVA. Treatment Plans,
	IVB. Assess and monitor interactive courses of both disorders;
	IVC. Procedures for psychiatric emergencies and crisis management
	IVD. Stage-wise treatment ongoing
	IVE. Policies and procedures for medication evaluation, management, monitoring, and compliance,
	IVF. Specialized interventions with mental health content,
	IVG. Education about psychiatric disorder and its treatment, and interaction with substance use and its treatment, ,
	IVH. Family education and support
	IVI. Specialized interventions to facilitate use of dual diagnosis self-help group,
	IVJ. Peer recovery supports for patients with MH
Continuity of Care	VA. Co-occurring disorder addressed in discharge planning process
	VB. Capacity to maintain treatment continuity
	VC. Focus on ongoing recovery issues for both disorders
	VD. Facilitation of self-help support groups for Co-occurring disorder (COD) is documented
	VE. Sufficient supply and compliance plan for medications is documented.
Staffing	VIA. Psychiatrist or other physician

	VIB. On site staff with MH licensure (doctoral or masters level),
	VIC. Access to mental health supervision or consultation.
	VID. Supervision, case management, or utilization review procedures emphasize and support COD treatment
	VIE. Peer/Alumni supports are available with COD
Training	VIIA. All staff Members have basic training in prevalence, common signs and symptoms, screening and assessment for psychiatric symptoms and disorders,
	V11B. Clinical Staff Members Have Advanced Specialized Training in mental health and substance use disorders, including pharmacotherapies.

The DDCAT index evaluates a program in 35 elements subdivided into 7 domains (Table 3). Program Structure focuses on general organizational dimensions that foster or inhibit the development of integrated treatment. The Program Milieu dimension focuses on the culture of the program and whether the staff and physical environment are receptive and welcoming to persons with co-occurring disorders. Clinical Process dimensions (Assessment and Treatment) examines whether specific clinical activities achieve specific benchmarks for integrated assessment and treatment. The Continuity of Care dimension examines the long-term treatment issues and external supportive care issues commonly associated with persons who have co-occurring disorders. The Staffing dimension examines staffing patterns and operations that support integrated assessment and treatment. The Training dimension measures the

appropriateness of training and supports that facilitate the capacity of staff to treat persons with co-occurring disorders.

The DDCAT categorizes programs into three different levels of services: (1) Addiction only services (AOS): the program is capable to offer services at an addiction only service level. The program does not accommodate individuals with mental health disorders. (2) Dual Diagnosis Capable (DDC): the program is capable of offering services at a dual diagnosis level and is capable of treating individuals with mental health disorders that are stable in addition to addiction services. (3) Dual Diagnosis Enhanced (DDE): the program can treat individuals with acute and unstable mental health disorders and addiction disorder.

CHAPTER 3: CONCEPTUAL AND THEORETICAL FRAMEWORK

The DDCAT framework is based on the conceptual framework of the taxonomy of addiction treatment services outlined by the American Society of Addiction Medicine (ASAM) (ASAM Patient Placement Criteria Second Edition Revised (ASAM-PPC-2R, 2001) and on the theoretical framework of the Trans Theoretical Model of Behavior Change (TTM) also referred to as stages of change theory (Hansen, et al., 2008). SAMSHA determined that a need existed to classify organizations that treated dually diagnosed individuals according to capability ratings. ASAM developed the conceptual framework taxonomy to classify the dual diagnosis capability of addiction, which includes three categories of capability: Addiction only service (AOS), Dual diagnosis Capable (DDC), or Dual Diagnosis Enhanced (DDE). The DDCAT utilizes the categories outlined by ASAM and incorporates fidelity assessment methodologies, which are observation methods and objective metrics to ascertain the dual diagnosis capability of addiction treatment services: AOS, DDC, or DDE.

The DDCAT framework is based on the Trans Theoretical Model of Behavior Change (TTM) outlines Prochaska and Diclemente, (1983) change theory and Mezirow's Trans formative theory. It outlines enhanced services by anticipating an organization's likelihood of behavioral change. The TTM has been used by various agencies and institutions to facilitate behavior change. This validated model is used in many substance abuse treatment programs. According to Hansen et al. (2008) the Trans theoretical model of change and Tran's formative theory of learning are demonstrative of the process of organizational structure change. The

DDCAT index resulted as a response to addiction programs that were in the action phase of readiness. It offers practical, useable materials to enhance services for the dually diagnosed.

Focused Evidence Appraisal of DDCAT Use in Agencies

A number of studies have utilized the DDCAT to evaluate programs that provide services for individuals with dual diagnosis (Drake, et al., 1998). These studies demonstrate that the DDCAT can be feasibly used to evaluate barriers and facilitate agency capability (Drake, et al., 2001). What follows is a brief description of five studies that have implemented the DDCAT evaluation in various settings.

One team of researchers studied 30 treatment programs using the DDCAT in two California counties. Seven of the programs received funding to provide both mental health and substance use disorder services, 13 received funding to provide mental health services, and 10 received funding to provide substance use disorder services. The study addressed the programs' capacity to meet the needs of clients with dual diagnosis, identified areas where they were well equipped to serve these clients, and determined where improvement was needed. The study also evaluated the impact that funding sources had on the capability of program services for the dually diagnosed. Programs that received funding to provide integrated care were found to consistently score higher in DDCAT scores than the other programs that did not receive such funding. The investigators found that program structure and staff training were the DDCAT domains that required the most improvement for endorsement for dual diagnosis capability, while staff training was the highest endorsed priority area for improvement; program structure was the lowest priority. In addition, mental health programs scored higher than addiction treatment programs in most DDCAT domains and the overall assessments (Padwa, Larkins, Crevecoeur-MacPhail, Grella, & Christine, 2013).

In another study, the DDCAT was used to examine 185 state-licensed outpatient substance abuse clinics to evaluate their capability in delivering integrated services for individuals with dual diagnosis (Chaple, Sacks, Melnick, McKendrick, & Brandau, 2013). Client retention and the relationship with capability scores were measured. There was a significant positive relationship between DDCAT scores and client retention. The results indicate that programs with high DDCAT scores had greater length of stay and better treatment outcomes. Screening/assessment and treatment were the only dimensions unrelated to the length of stay of patients in addiction programs. Program structure, program milieu, treatment, continuity of care, staffing and training were related to length of stay (Chaple, et al., 2013).

Researchers in Australia utilized the DDCAT to examine the program manager's perceptions for change after the completion of the DDCAT; they also examined the usefulness of the DDCAT in two residential substance abuse programs. Sixteen residential substance abuse units were examined using the DDCAT by an external researcher. The researchers reported positive attitudes towards use of the DDCAT and were confident that their unit could improve their DDCAT scores (Matthews, Kelly, Deane, & Frank, 2011).

Another team of researchers surveyed 453 addiction treatment providers who were asked to identify their program as Addiction Only Services (AOS), Dual Diagnosis Capable (DDC) or Dual Diagnosis Enhanced (DDE). The survey also queried providers on prevalence estimates, clinical practices, and perceived barriers to treating persons with co-occurring substance use and psychiatric disorders. The providers were provided brief definitions of the services, 92.9% of providers surveyed categorized their program as: AOS (23.0%), DDC (65.3%) or DDE (11.6%). The program dual diagnosis capability varied by characteristics of the patient, clinical practices, and barriers to effective treatments. The findings support the utility of the ASAM dual diagnosis

capability taxonomy, and suggest specific avenues for system and program assessment and future research (McGovern, et al., 2007).

Similarly, a set of researchers examined eighty-six programs, 54 addiction treatment programs and 32 mental health treatment programs at baseline and 18-month follow-up using the DDCAT index. The researchers examined implementation factors associated with addiction and mental health treatment program improvement in services to persons with co-occurring substance use and psychiatric disorders. The study had two primary aims: 1. to articulate factors associated with successful program change and 2. to determine whether the effective factors are different by program type.

During follow-up, program leaders were surveyed about implementation factors that may have accounted for changes in capability. The results showed that both addiction and mental health programs significantly improved dual diagnosis capability during the study period. Factors associated with positive change in addiction treatment programs included organizational and contextual components, use of the commonly recommended implementation strategies, and deploying evaluation methods. The study concluded that both mental health and addiction treatment programs can enhance dual diagnosis capable services through a variety of implementation approaches (McGovern, 2007b).

CHAPTER 4: PROJECT PURPOSE AND RATIONALE

The report to the United States Congress in 2002 identified an increased need to address individuals with dual diagnosis and an inadequate utilization of evidence-based models in treatment programs for patients with dual diagnosis (SAMSHA, 2002). This resulted in undesirable consequences, which include inpatient psychiatric hospitalization, increase in aggressive and violent behaviors, medication noncompliance, greater exacerbation of psychiatric symptoms, and poor personal hygiene (Bogenschutz, 2013). Programs that offer integrated services that adhere to evidence-based principles are more likely to produce desired treatment outcomes such as medication compliance, lower relapse rates and control of psychiatric symptoms (Torrey, et al., 2002). Therefore, SAMSHA recommendations are for programs that offer dual diagnosis services to provide integrated care to patients (SAMSHA, 2002).

The DDCAT is the only evaluation tool produced and endorsed by SAMHSA to assess an agency's capability for providing integrated services to dually-diagnosed individuals. The assessment with the DDCAT categorized the agency according to Addiction only service (AOS), Dual diagnosis Capable (DDC), or Dual Diagnosis Enhanced (DDE). There has been limited research on the use of the DDCAT index to determine the capability of integrated dual diagnosis care in community-based health centers that include substance abuse and mental health programming.

The purpose of the project was to use the DDCAT index to evaluate an existing CBHA that provides mental health and substance abuse service to dually-diagnosed clients. The DDCAT index was used to identify the capability of the agency to provide integrated services to the dually diagnosed and the findings were used to recommend changes that could be made to enhance services and programs to facilitate the improvement of treatment outcomes.

CHAPTER 5: TARGET SITE/PARTICIPANTS

CAARE, Inc. is a grassroots, non-profit organization in southeastern United States that promotes a holistic and community approach to health. CAARE, Inc provides a wide variety of services that help treat not only the medical roots of chronic diseases, but also the social and human factors that contribute to these health deficits. CAARE, Inc seeks to address disparities in health care access, and over the past nineteen years has created a community devoted to helping people make all parts of their lives healthier. CAARE, Inc. began as a non-profit community based provider of supportive services for individuals living with HIV/AIDS and their affected families. The goal was to support, educate and empower the HIV/AID community and high risk populations. The expanded goal is the promotion of a healthier Durham community through a holistic program to help decrease a broad range of health disparities that are affecting global health. The five health disparities include cancer, cardiovascular disease, diabetes, obesity and HIV/AIDS. These five health disparities have become CAARE, Inc's primary healthcare service focus areas.

The holistic program addresses additional specific programmatic areas including Case Management, Substance Abuse Treatment, VA Traditional Housing and the Jeanne Hopkins Lucas Education and Wellness Free Clinic Center. Each of these projects maximizes positive healthcare results. The HIV/AIDS program also provides a food pantry, community outreach, free education on HIV/AIDS and other STDs, free one-on-one consultation and risk reduction.

The Outpatient Substance Abuse Treatment Program includes the Substance Abuse Comprehensive Outpatient Treatment (SACOT) and the Substance Abuse and Mental Health

Services Administration (SAMHSA). These not only provide individual and group therapy sessions but also random and ongoing urine drug screening, referrals to psychiatric evaluations, relapse prevention group sessions, crisis contingency planning and DWI Outpatient Treatment for 20 and 40 hours. The services implemented by CAARE, Inc‘s SACOT and SAMHSA have been life-saving interventions for many who lack financial resources for most needed healthcare services.

The Mental Health Program includes psychotherapy for individuals, couples, and families. CAARE, Inc. also provides psychotherapeutic medication management, depending on individual patient needs and preferences. In addition, the mental health program includes aftercare relapse prevention psychotherapy groups (Enlightenment Recovery Group) for graduates of the 16-week comprehensive outpatient substance abuse program. The mental health program at CAARE, Inc. incorporates holistic strategies with psychotherapeutic techniques, including mindfulness and an appreciation for the contribution of good quality nutrition, sleep, living environments, healthy relationships, and spiritual fulfillment to optimal mental health and well-being. The mental health program incorporates compassion and cultural sensitive approaches; clients are encouraged to identify their strengths and heart’s desires to facilitate goal attainment and life satisfaction.

CHAPTER 6: METHODOLOGY

The project followed the guidelines included in the DDCAT index toolkit which had instructions on the scoring of the different program domains and categories. The scoring was based on observation, interviews with agency staff members and consumers, and review of documentation for the purpose of data collection according to DDCAT index. Observations of physical milieu, physical structure and two group programs, the SACOT program and the Aftercare program were done using criteria outlined in the DDCAT index.

Staff members and clients were interviewed with questions that were outlined in the DDCAT index under the seven domains. Interviews were conducted with the executive director, the substance abuse program director, the mental health program director, a certified care support specialist, a Certified Substance Abuse Counselor intern (CSACI), the licensed clinical social worker, and two randomly selected clients from the SACOT program and aftercare programs.

The review of documents was done with outlined instructions from the DDCAT index . Five active charts and five discharged charts were reviewed from the SACOT program. Five active charts and one discharged patients' chart were reviewed from the mental health programs.

Observational Approach

Observational methods were used to gather information about the substance abuse and mental health programs and rate its status regarding dual diagnosis capability. The following areas were observed and were used for data collection: observations of the milieu and physical setting, observations of the substance abuse comprehensive outpatient treatment program

(SACOT), and observation of the Aftercare substance abuse program. Observation of the milieu and physical setting was done during tours of the facility, while the SACOT and Aftercare programs were observed on two different days for an entire days' session according to the DDCAT index.

Interviews with Agency Staff members and consumers

Interviews/conversations with the agency director, substance abuse director, mental health director/psychiatric nurse practitioner, substance abuse counselor, and consumers were done to gather information about the mental health and substance abuse programs and rate their dual diagnosis capability. Interviews lasted approximately one hour, and were conducted onsite. Interview questions followed the guidelines included in the DDCAT index toolkit which had outlined questions for agency director, clinicians and consumers. Answers to the questions were used to score and rate the different program domains and categories.

Review of Documents

Documents reviewed included brochures, policy and procedure manuals, patient activity schedules, and other pertinent materials to score the DDCAT index. Copies of documents were obtained to review ahead of time. Five charts of active clients and discharged clients from the substance abuse program were reviewed. Five charts of active mental health client and one discharged client chart was reviewed for the mental health program.

DDCAT Process/Procedure

The DDCAT process included key benchmark activities that were performed before and during the utilization of the DDCAT. Prior to the utilization of the DDCAT there was an identification of a contact person/agency leader, a definition of the scope of the assessment, and a clarification of the time allocation requirements. During the utilization of the DDCAT index

observation, interviews and review of documents were done according to criteria outlined in the DDCAT index.

The initial meeting with the agency director was scheduled to convey the purpose of the assessment and to relay any implications of the data being collected. Other scheduled meetings included: agency tour and introduction to agency staff, data collection interviews with designated agency staff and consumers, and an "exit" feedback meeting with the agency director and staff members including: Executive director (agency director), SA Director/Intake Coordinator, SA facilitator/Peer Support Specialist, SA facilitator/Peer Support Specialist, Mental Health Director/Psychiatry Mental health Nurse Practitioner, SA Office Assistant/Volunteer, and MH Office Assistant/Volunteer.

An initial meeting with the contact person/agency director was conducted to discuss the project and to receive formal approval of the methodology. A second meeting was conducted with the contact person/agency director to gather descriptive information about the program to be listed on the DDCAT rating scale cover sheet. This was used in tabulating, and making comparison of DDCAT scores. The information provided in the second meeting was used to provide a format to organize basic information and provide the agency with information regarding data sources used and the assessment process. Next, a meeting was scheduled to allow the contact person/agency director to introduce the evaluator to the agency staff, describe the project goals to the staff, and schedule days and times to complete the formal site visit and evaluation using the DDCAT index. The next step involved a formal tour of the program physical site. This was done for re-introduction of staff to the project, observation of the milieu, to meet additional staff and consumers, and have conversations with them to collect data as outlined in the DDCAT index. The data collection and the formulation of the findings were

completed over five months, and feedback was provided to the contact person/agency director and the staff.

Procedure Timeline

The evaluation took five months. The sequence of activities is shown below.

- Month 1 (July 2014): IRB Submission and Approval
- Month 2 (August 2014): Site Visit/Data Collection; print DDCAT assessment packets, implement DDCAT Index tool kit. Interview the staff and patients • Month 3 (September 2014): Data analysis and interpretation of findings
- Month 4 (October 2014): Reporting of oral results to agency
- Month 5 (November 2014): Submission of written project to agency

CHAPTER 7

: OBSERVATIONAL FINDINGS

Observations of Physical Milieu and Physical Structure

CAARE, Inc. is housed in downtown Durham, NC and consists of three buildings; a large two level brick building, which serves as the main office building and two smaller houses behind the brick building. In the main office building the main level houses staff offices, a board room, a non-denominational chapel, CAARE, Inc. economic incubator center, mental health counseling, the CAARE, Inc. outreach program, the GED Program/Computer training Center, the event center and for the Kids Club room. The second level (downstairs from the main level) houses the Wellness Center which encompasses treatment space for Reiki, the massage therapy center, auricular acupuncture center, a fitness room with weights and cardiovascular equipment, the medical clinic, and the dental clinic. On the lower level of the main building there is also a fifteen bed veteran's dormitory. Behind the main brick building is a green house, above ground garden beds, a large rain water harvesting tank, and space for the creation of an apothecary garden. In addition there is a house that is under renovation to eventually become a dormitory for women and a substance abuse and recovery club house. Most of the substance abuse treatment group meetings are held in the club house.

The main office building has a waiting room with comfortable chairs lining the walls and a reception area in the middle of the waiting area with a receptionist who welcomes visitors, patients or staff. The receptionist also answers all phone calls. The walls are covered with pictures and posters. One wall has various licenses, certifications, and awards that have been

presented to the center: CARF (Commission on Accreditation of Rehabilitation Facilities) international 3 year accreditation for healing with CAARE, Inc., a license for adult intensive outpatient treatment for alcohol and other drugs, a license for outpatient treatment of alcohol and other drugs/addiction (adults), a Department of Health and Human Services (DHHS) certification for the provision of substance abuse services for individuals who have been charged with driving while impaired offender, an a mental health facility license, a certificate of collaboration with the Durham Center, and a business certification. A brochure stand sits at the corner of the waiting area with AA and NA materials and meeting schedules, along with pamphlets on HIV/AIDS, and state employment and financial assistance services. Another waiting area has a bulletin board that has an announcement for Zumba dance, line dance and various other activities.

Observation of SACOT group

The SACOT group is held on weekdays from 9am-1pm for sixteen weeks. It is primarily a substance abuse recovery/treatment group. Patients have to commit to attend all groups and maintain sobriety. The group is held on site in the clubhouse. The group is facilitated by two certified peer support specialists (CSAC). They utilize the Matrix Model manual for each of the classes. It is a closed group. Group rules are posted on the walls of the class. The class begins with a sign-up sheet and introduction of the lesson and activity for the day. Participants are invited to ask questions. There is open interaction between facilitators and participants. Participants are aware of the rules and respectful of others. The facilitator ensures that everyone in the group is participating by calling on different individuals to answer questions or summarize the lesson. During my visit to the group, the day's lesson was on addictive behavior and participants were handed out copies from the Matrix manual that showed different kinds of

behaviors: participants had to pick which of the behaviors are related to their drug or alcohol use. Participants were given ten minutes to finish the activity. This followed up with an interactive discussion between facilitator and participants. Participants appeared to enjoy the interaction and provide feedback to facilitator. The class ended up with an invitation to lunch for all participants (Note: a hot meal is served for lunch after each SACOT class).

Observation of Aftercare Program

The aftercare program is a relapse prevention outpatient program that takes place onsite at CAARE. It is an open group to graduates of the 16-week SACOT program. It is facilitated by the PMHNP who is also the mental health program director. Participants are encouraged to be open and interactive. On the day of observation participants were welcomed to the group and the facilitator summarized the group rules. The facilitator made the group aware of what the activity was for the day. A handout for the activity was given out titled: enlightenment continuing recovery group. The activity was for participants to reflect upon the past week and what activities they engaged in each day to enhance their success in recovery. Participants were given ten minutes to finish the activity. There was open discussion following the activity, and then participants were instructed to reflect on whether they would do the same activity this present week or something different. Participants were instructed to write out their plans for the present week in the second row of the handout. After the activity was completed there was open discussion and interaction. The group session concluded with reading the daily text from the twelve steps: the ninth step-reclaiming life and everyone reciting the serenity prayer.

CHAPTER 8: INTERVIEW FINDINGS

Interview of Executive Director

The executive director has a PhD in divinity and is a master's prepared registered nurse. She describes the program as a substance abuse and mental health not-for profit, outpatient program. She reported that although the program is not called a dual diagnosis program it is licensed to provide substance abuse outpatient and mental health services, and is funded by Medicaid. She reported that the primary focus of the agency is addiction treatment services, mental health services and general health services. The agency offers a sixteen week substance abuse comprehensive outpatient treatment program (SACOT), HIV case management, VA housing, job training program/job links, substance abuse aftercare program, GED classes, computer classes, benefits aid eligibility for Medicaid, a food pantry, massage therapy, acupuncture therapy, a service club for children (Kids club), a library, coffee shop, a gym, a free medical and dental clinic, and the clinic educational wellness center. She estimates that the substance abuse program had 100 admissions in the last fiscal year, 120 serviceable capacity, and a 20 week average length of stay, a 16 weeks planned length of stay, and 100 unduplicated clients per year. The programs are exclusively for adults on an outpatient basis.

Interview of the Substance Abuse Program Director

The substance abuse program director is a licensed substance abuse specialist (LSAC) who reported that the agency is licensed to provide both mental health and substance abuse treatment. An initial screening is done by phone or in person that ascertains if the person has had prior substance abuse treatment, their last use, and their drug of choice. She gives the assessor a

copy of the intake packet which includes a bio-psychosocial evaluation, a brief mental status section, along with a series of questions about both substance use and treatment histories, and similar questions about mental health symptoms and treatment. The form also asks if the individual is currently on any psychiatric medications, and if so, which ones. She reported that when a patient is identified at screening with a mental health disorder a referral form is filled out and sent to an in-house psychiatric nurse practitioner who follows up with a phone call to make an appointment with the patient, and after seeing the patient generates a mental health patient-centered care plan. She reported that she also generates a treatment plan with a focus on substance abuse treatment.

The patients are referred to the agency through different sources: Alliance, Durham crisis center, hospitals, the judicial system, alcohol and drug treatment centers, other agencies, the court, and others are self-referrals. All patients are admitted to SACOT if they have a substance abuse diagnosis. She estimates that sixty percent have dual diagnosis, but admits that there is no record of dual diagnosed patients. The evidence-based Matrix Model client handbook is used as the teaching tool in the SACOT program. There are no posters or videos used for teaching. The Beck Depression Scale and alcohol standardized screening forms are used during the intake process. She estimates that 60% of the program's 160 clients have co-occurring disorders. When asked if there are any admission restrictions, she answered in the negative, stating that "everyone is welcome."

She reported that CAARE, Inc was created to meet the community's needs; therefore not everyone that comes in will have a mental health or substance abuse diagnosis, but may need food or referral for shelter. She reported that for individuals who are admitted to the substance abuse comprehensive outpatient treatment program (SACOT), the program policies require

individuals to have a primary substance use disorder for licensing and billing reasons. Although the program attempts to accommodate "everyone," they are selective with patients with a co-occurring mental health disorder, and will refer them to the local mental health clinic if they are noted to be unstable with active psychosis. That practice is not in writing; however, she reported the program will admit individuals with a co-occurring mental health disorder if they are stable on their medications.

She reported that the policy does not formally exclude any population, but sometimes will exclude sex offenders or anyone mentally unstable. Although the Program Director reported the agency welcomes everyone, she reported that the SACOT program is not always the best fit for individuals with active psychotic disorders and that they keep an eye out for medications that would indicate this. These individuals are referred to the local mental health clinic. Individuals who are suicidal or homicidal are likewise not admitted. When asked about any specialized interventions for individuals with co-occurring disorders, the Program Director reported that there are no specialized programs. She reported that the substance abuse is facilitated by two certified peer support counselors who recently completed workshop in motivational interviewing.

When asked about staff training, she reported that due to financial constraints, the agency does not have any formal, in-house staff training programs for substance abuse, Training is done online or staff go voluntarily for free training. She reported there is no set program training plan. Staff are allowed time off to go to training conferences. She reported that the facilitators of the substance abuse have a good understanding of co-occurring disorders and typically sign up for new co-occurring trainings provided online or off site.

The Program Director reported that there are no staff specialized in treating co-occurring disorders, but the intake person is an LCSW with a Master's Degree in Social work, who has extensive experience in co-occurring disorders. Two counselors are certified peer support counselors (CSAC) and are working on completing their Certified Addiction Counselor Credential from the State Certification Board. She denies any formal training for clerical staff since they are not engaged in treating clients. The Program Director indicates that she provides weekly individual supervision to all the facilitators and intake clinician. She reported she operates on an open door policy and staff can come to her at any time. The Program Director reported that the program has an onsite psychiatric nurse practitioner who sees the patients with co-occurring disorders. Referrals to the nurse practitioner are done routinely when patients are identified with mental health problems. She reported that the psychiatric nurse practitioner renews prescriptions as needed for patients with co-occurring disorders. She reported that not all the patient's with co-occurring disorders are seen by the PMHNP, some are managed by the local health clinics or their private psychiatrist.

The Program Director provided a tour of the agency pointing out the clubhouse for the SACOT program, and the rooms used for aftercare. Graduates from the SACOT program are advised to continue to attend aftercare to assist with sobriety and prevent relapse. The program director is not aware of any specialized referral to dual diagnosis programs.

Interview of the Mental Health Program Director

The mental health program director has a PhD in Social and Health Psychology and is a PMHNP. When asked about the program structure she reported that the mental health services are provided through consultation from the SACOT program through a referral process. She sees the patient onsite one and one-half days weekly with some informal integration with the

SACOT program. She reported that starting recently this year, the SACOT and mental health services have begun use of a single treatment plan. She adds an addendum to the treatment plan developed by the SACOT program. She also develops her own treatment goals and updates it as necessary at each visit. There is no formal treatment team meeting with the SACOT program due to her schedule; she can only be there twice weekly and devotes this time to patient care. She reported the program welcomes all patients. Patients are self-referred or referred from the SACOT intake. She schedules the patients for an evaluation; if she is not able to schedule in 2-4 weeks she refers the patient out. She estimates that the percentage of patients with co-occurring disorder is 75%-85%, but there is no formal documentation.

She reported she does not routinely provide literature/educational materials to patients about substance abuse or mental health or their interaction, but will provide literature if clients request it. She does not routinely use posters or videos during visits. She used handouts mostly during the twice weekly aftercare sessions. There are no documented admission limitations re: symptom acuity, or symptom severity but patients need to primarily stable on their medications. She reported that stages of change or motivational stages for MH and SA are not formally assessed during treatment. Patients are not matched to formal stage-wise treatment frameworks.

The program has documented procedures for psychiatric emergencies and crisis management which is given to the patient during admission. It has a 24 hour business cell phone that is made available to the patients. There are written guidelines including a standard risk assessment that captures MH emergencies and identifies intervention strategies. A formal arrangement with Alliance Behavioral Health, the local management entity for behavioral health, is documented to help manage crisis situations. There is a documented in-house crisis management guidelines and goals.

Pertaining to clinical treatment she uses specific therapeutic interventions/practices that target specific MH symptoms and disorders such as CBT, psychodynamic, interpersonal-(eclectic) – person centered. The program addresses generic interventions (e.g. stress management, coping skills) informally during the aftercare program. There are no specialized (e.g. manual-based) interventions for specific disorders, systematic adaptation of EBP addiction TX, or integrated EBP for COD. She reported that the program provides generic education about MH disorders, treatment, and interaction with SUD; this is variably offered. There is no curriculum used for aftercare. Patients are not formally matched with individual peer supports and role models, but are aware that they can contact her at any time. She makes her cell phone number available and the crisis line has peer support specialists available. There is no formal documentation in the treatment plan.

Pertaining to family involvement in the client's treatment process, she reports that there is no formal family involvement in the treatment process but she will involve the family at the request of the patient or will make a suggestion to involve the family if it seems appropriate. She makes the patients aware that their families are welcome to their sessions. She assists individuals with dual diagnosis to develop a support system through self-help groups using variable interventions, mostly to addiction peer support groups. This is a generic on-site format. There is no intentional facilitation based on MH disorders.

Pertaining to continuity of care, she reported that there is no formal or specialized method for interventions to facilitate use of community-based peer support groups but some patients have been referred to the local clubhouse programs for psychosocial rehabilitation.

During discharge planning patients are referred to the aftercare program which has no discharge date. There is no documented philosophy of recovery for the agency or the client.

She manages and maintains medication planning and prescription renewal. Most of her patients are not discharged from her care; she continues to provide routine 30-day medication supply; with typically three refills ordered. She provides medication management services at the agency.

Pertaining to staffing, she reported that program maintains staff and volunteers in recovery from dual diagnosis who can serve as peer/alumni supports, but there is no formal protocol to insure ongoing site supports. She operates an open door policy and patients and staff have access to her. She attends treatment team occasionally, but due to scheduling cannot be there all the time. She receives supervision from a psychiatrist as outlined in her collaborative practice agreement, but also consults with her peers off-site as needed. The primary focus for supervision and consultation is case disposition. She reported there is no formal case/utilization reviews done to monitor appropriateness or effectiveness of services for dual diagnosed patients.

In the event of a mental health emergencies or crises the written crisis protocol is followed. She reported that the agency has had only four emergencies in four years. When a client is noted to be decompensating and needing crisis management, a referral or transfer is made with the local behavioral health crisis center or911 emergency services are called.

Interview of SACOT Counselor

One facilitator of the SACOT program was interviewed. She is a Certified Peer Support Counselor, (CSAC). She reported that approximately 85% of the clients have dual diagnosis. She reported that clients are screened at intake by an intake specialist and referred to the PMHNP. She does not know how that works. She is mainly focused on facilitating the SACOT program. The clients are required to attend the program daily from Monday to Friday for sixteen weeks from 9am to 1pm. She uses the Matrix manual which is a recommended

substance abuse manual from SAMSHA to facilitate the class. She reported that specific topics dealing with dual diagnosis are addressed during the sixteen weeks, and patients are advised to notify staff if they have symptoms and need further treatment. Patients are taught about the interaction between substance abuse and mental health during the sixteen weeks. Random drug test are done and patients that fail the drug test have to start the program over. Patients are given handouts and encouraged to attend the local AA, NA group meetings. An AA meeting is held every Wednesday and patients are required to attend. She operates an open door policy and is very excited to be facilitating the classes. She tells the participants about her recovery and is open about her diagnosis, which she believes helps the participants with their recovery. She reported that although most of the clients are dual diagnosed their diagnosis does not affect their participation in the program. However if a client is noted to be having issues she collaborates with the PMHNP for evaluation and recommendation. She reported the PMHNP is always available by phone for consultation. There are no formal scheduled meetings with the PMHNP.

In regards to supervision, she reported that all counselors are supervised by the SACOT program director weekly. There is a formalized treatment team meeting where personal care plans are developed. She reported the program director is assessable for questions and interventions when needed. They have weekly staff meetings where several clients are reviewed and updated. Discharge planning is done from intake. Patients are discharged to the aftercare program. She reported that the program organizes a graduation for the clients after sixteen weeks. Four graduations are held annually. Patients look forward to the graduation. Previous graduates return to be key note speakers during graduation.

When asked about psychiatric emergencies or crises, she reported there is a protocol and guidelines for emergencies. Patients are made aware of the crisis line at intake and throughout

the program. In the event there is a crisis during class she will call 911 and seek for further help.

When asked if she assesses for stage of change, she reported she uses her training in motivational interviewing, but there is no formal documentation that stages of change are evaluated. She does not do any specific linking of clients to specific groups or individuals, but encourages clients to attend local groups and "work their steps" to stay in recovery.

Interview of Consumer

Two clients were selected and asked to be interviewed: one from the SACOT program and one from the aftercare program. The client from the SACOT program reported that the program has helped him. He has been in the program for four weeks. He reported that the staff members in charge of the SACOT program are in recovery, which helps them identify with the clients. He reported that "everybody knows everybody". He admits to being dual diagnosed and reported being diagnosed with depression. He reported he is not aware of the agency's mental health program or Aftercare program. He reported that he has a local mental health provider that prescribes his medication. He reported that family members are not allowed in the meetings. He reported that he can talk with the counselors about anything when he calls them. He reported mental health issues are discussed during the classes and the counselors' advise patients to continue to take their medications

The individual interviewed from the mental health program admitted that she liked the program and everyone was nice to her. She has been in the program for two and a half years. She graduated from the SACOT program and is presently is in the aftercare program. She reported she occasionally volunteers in the SACOT program to encourage the participants. She reported that the counselors encourage the participants to volunteer after graduation. She is not

linked to anyone in the program with a co-occurring disorder. She reported she does not think she is ready for that at this time. She has an AA sponsor and she attends aftercare. She reported she has no insurance but continues to be seen by the PMHNP. All her medications are prescribed by the PMHNP. She reported that mental illness is not discussed during aftercare and she would like to see it discussed more, because of the impact of mental illness on substance use and abuse. She reported that mental illness is not a choice and feels that it should be discussed openly during the aftercare and SACOT meetings, because she feels most of the participants have mental illness. She reported she is not given any dual diagnosis literature in the program, but gets literature from her sponsor and enjoys reading the substance abuse literature. She reported that everybody does not come for the same reasons and therefore some people are more verbal than others. She feels the center is a safe place and she enjoys going to groups or coming out to volunteer. She reported that they are like a family. Aftercare keeps them connected to peers and help them feel personable. She reported that the PMHNP that facilitates the aftercare has helped her tremendously in her recovery and mental health. She reported that the PMHNP gives scenarios; draws on chalkboard which helps her understand her problems. She reported she has attended various seminars in the program e.g. seminars on breast cancer awareness, coping with stress, and financial health. She does not remember attending any seminar on mental illness. She reported she continues to come to aftercare because she wants to stay plugged in. She has spoken at past graduations about her experience in staying clean for two and half years.

CHAPTER 9: CHART REVIEW FINDINGS

Chart Review of the SACOT program

The charting system in the agency does not separate or distinguish dual diagnosed patients from addiction only patients, therefore charts were randomly selected. A review of five active and five discharged client charts of the SACOT program indicated that a comprehensive substance abuse assessment is done on each client. The program director had discussed the referral process indicating that clients were referred to a mental health program, but there was no referral form or indication in the ten charts reviewed. The comprehensive substance abuse assessment has a bio-psychosocial evaluation, which is completely filled out in all the charts, but information appears not to consistently match what is seen in the progress notes and personal care plan. For example, one bio psychosocial evaluation showed the patient was not on medications, but a person-centered care plan mentioned that the patient's medications would be monitored. The person-centered care plans appear to be generic instead of addressing individual goals. Mental health and substance use history and diagnoses are present in all the charts, but appeared to be contradictory in two charts where the bio-psychosocial evaluation showed different diagnoses compared to the treatment plan diagnosis. Mental health and substance abuse history reflected inconsistencies in three active charts and two discharged patient charts; where patient's records indicate that they were on several psychotropic medications. Two active charts had a Beck depression screening tool while three charts had none. Three discharged client charts had the Beck depression screening tool, while two did not have one. All the patient charts had an alcohol screening tool.

All charts reviewed had a person-centered treatment plan with comprehensive and individualized goals. The treatment plans addressed relapse prevention issues and goals for medication compliance. Treatment plans in three out of five active charts addressed both mental health and substance abuse disorders. Treatment plans in two out of four charts addressed both disorders even though all patient charts reviewed had dual diagnosis. None of the charts had evidence of stage-wise treatment assessment or stage-wise treatment plan. Stage-wise treatment refers to treatment planning which is based on the patient's readiness to change and level of treatment such as persuasion vs. active treatment; pre-contemplation; contemplation; action; maintenance (SAMSHA, 2011).

Progress notes indicate sixteen weeks SACOT program requirement for relapse prevention and education about addiction using the matrix manual. Although all charts reviewed included mental health diagnoses, there were no areas in charts that indicated (1) coordination and collaboration with mental health services, (2) assessment and monitoring of interactive courses of mental health and substance abuse disorders, or (3) specialized interventions with mental health content or education about mental health disorders. Progress notes were focused on substance abuse relapse and education. Progress notes did not indicate family education as part of treatment interventions or specialized interventions to use peer support groups.

All ten charts reviewed had a generic discharge planning form attached. The five active charts had no entries on the discharge planning forms since they were still active clients. The discharged clients' charts were incomplete. Dual diagnosis was not addressed in discharge planning process. Clients' capacity to maintain treatment continuity was not addressed on treatment forms. Focus on ongoing recovery issues for both disorders were not indicated on forms. Facilitation to substance abuse support groups was addressed, but not addressed for

mental health in two charts. Sufficient supply of meds, and confirmed follow-up appointment was not addressed in discharge plan. Medications at time of discharge were on four out of five charts; all patients had medications at discharge according to comprehensive assessments. All of the discharge plans include recommendations to regularly attend AA/NA meetings, obtain a sponsor, and attend the aftercare program. There was no documentation of confirmation of follow-up appointment or medication management, or refill of medications. The program director had discussed the referral process indicating that clients were referred to a mental health program, but there was no referral form or indication in the ten charts reviewed.

Chart Review Mental Health Program

A review of five active and one discharged client charts of the mental health indicated that a comprehensive mental health and substance abuse assessment is done on each client. The comprehensive mental health assessment has a bio-psychosocial evaluation which is completely filled out in all the charts, and information is consistent and accurate when compared to what is seen in the progress notes and personal care plan. The personal care plans of five active charts address individual patient goals and issues addressed in progress notes. The patient-centered care plan was not available for the discharged client whom PMHNP reported was seen under the old system that utilized different documentation of patient plans of care. Mental health and substance use history and diagnoses were present in all the charts in the mental health evaluation and also the progress notes. There were no screening tools in any of the charts reviewed for mental health or substance abuse disorders.

All charts reviewed had a personal treatment plan with comprehensive and individualized goals. Progress notes indicated an update of individualized goals and treatment plan at every visit. The treatment plans addressed relapse prevention issues, mental health issues and goals

for medication compliance. None of the charts had evidence of stage-wise treatment assessment or stage wise treatment plan. Stage wise treatment refers to treatment strategies that are the client's level of readiness to change and stage of treatment: persuasion vs. active treatment; pre-contemplation; contemplation; action; maintenance (SAMSHA, 2007).

All charts reviewed indicated referral source, progress notes which where extensive and coherent showing initial intake, comprehensive mental health assessment, progress of treatment, treatment updates and medication management and refill process. Charts indicated referral to the aftercare program and participation in the aftercare program and individual therapy. All active charts had a form that indicated coordination and collaboration with substance abuse program. There were no areas in the charts that indicated assessment and monitoring of interactive courses of mental health and substance abuse disorders. There were no areas in the chart that indicated specialized interventions with substance abuse education. Progress notes were focused on mental health and substance abuse relapse and education. Overall, progress notes indicated a lot of work on mental health, individual therapy, and some education about addiction. Several of the charts have documentation for coping skills, stress management and Aftercare participation. One of the progress notes indicated working with client to address anxiety issues, feelings of sadness, isolation issues, and relapse issues. Progress notes did not indicate family education as part of treatment interventions or specialized interventions to use peer support groups. All six charts reviewed had no discharge planning.

Analysis

The DDCAT toolkit was used to administer and score the DDCAT index. Instruments, forms and resources were included with the toolkit for scoring. Each element of the seven domains was scored using description and a scaled DDCAT ranking with the following values:

1-AOS related, 2-DDC related, 3-DDE related. The toolkit offered suggestions for enhancing programs. Each item included a section entitled "Item Response Coding," which provided descriptions to assist in scoring the different elements and categorize them into DDCAT rankings. The DDCAT index also provided descriptions for scores of 2 and 4, when observations fell between the 1, 3, and 5 ratings. The DDCAT index had a section titled "Source" which listed sources of the data to be considered in determining the score.

DDCAT Scoring Summary

What follows in Table 4 is a table to illustrate the agency's evaluation on each domain and element as outlined by the DDCAT scoring guidelines. The seven DDCAT domains and each element of the seven domains are detailed below. The purpose of this scoring system is to determine if the agency's services meet the guidelines for Addictions Only services (AOS), Dual Diagnosis Capacity (DDC) services or Dual Diagnosis Enhanced (DDE) services.

Table 4: CAARE, Inc. Scoring Summary

	Score	Comments
1. Program Structure		
IA. Primary focus of agency as stated in the mission statement (If program has mission, consider program mission) .	3	Primary focus is addiction, co-occurring disorders are treated.
IB. Organizational certification and licensure.	5	Is certified and/or licensed to provide both substance abuse and mental health services.
IC. Coordination and collaboration with mental health services.	4	Formalized coordination and collaboration, and the availability of case management staff, or staff exchange programs (variably used). Meets the SAMHSA definition of Collaboration and has some informal components consistent with

		Integration.
ID. Financial incentives.	5	Can bill for addiction or mental health treatments, or their combination and/or integration
Sum Total =	17	
Sum total/number of elements(4) = SCORE	4.5	
II. Program Milieu		
IIA. Routine expectation of and welcome to treatment for both disorders.	3	Focus is on substance use disorders, but accepts mental health disorders by routine and if mild and relatively stable as reflected in program documentation
IIB. Display and distribution of literature and patient educational material	3	Routinely available for both mental health and substance use disorders in waiting areas, patient orientation materials and family visits, but distribution is less for mental health disorders.
Sum Total	6	
Sum total/number of elements(2) =SCORE	3	
III. Clinical Process: Assessment		
IIIA. Routine screening methods for mental health Symptoms	3	Routine set of standard interview questions for mental health using a generic framework, e.g., ASAM-PPC (Dimension III) or "Biopsychosocial" data collection.
IIIB. Routine assessment if screened positive for mental health symptoms.	4	Assessment for mental health disorders is present, formal, standardized, and documented in 70-89% of the records.
IIIC. Mental health and substance use diagnoses made and documented.	2	Mental health diagnostic impressions or past treatment records are present in records but the program does not have a routine process for making and documenting mental health diagnoses.

IIID. Mental health and substance use history reflected in medical record.	3	Routine documentation of both mental health and substance use disorder history in record in narrative section.
IIIE. Program acceptance based on mental health symptom acuity: low, moderate, high.	3	Admits persons in program with low to moderate acuity, but who are primarily stable.
IIIF. Program acceptance based on severity and persistence of mental health disability: low, moderate, high.	3	Admits persons in program with low to moderate severity and persistence of mental health disability.
IIIG. Stage-wise assessment.	1	Not assessed or documented
Sum Total	19	
Sum total/number of elements(7)=SCORE	2.7	
IV. Clinical Process: Treatment		
IVA. Treatment plans.	3	Plans routinely address both disorders although substance use disorders addressed as primary, mental health as secondary with generic interventions.
IVB. Assess and monitor interactive courses of both disorders.	2	Variable reports of progress on mental health disorder by individual clinicians.
IVC. Procedures for mental health emergencies and crisis management.	3	Documented guidelines: Referral or collaborations (to local mental health agency or emergency department).
IVD. Stage-wise treatment.	3	Stage of change or motivation routinely incorporated into individualized plan, but no specific stage-wise treatments
IVE. Policies and procedures for medication	3	Present, coordinated medication policies. Some access to prescriber for psychotropic medications and policies to guide

evaluation, management, monitoring, and compliance		prescribing are provided. Monitoring of the medication is largely provided by the prescriber
IVF. Specialized interventions with mental health content.	3	In program format as generalized intervention (e.g., stress management) with penetration into routine services. Routine clinician adaptation of an evidence-based addiction treatment (e.g., MI, CBT, Twelve-Step Facilitation)
IVG. Education about mental health disorders, treatment, and interaction with substance use disorders.	4	Specific content for specific co-morbidities; variably offered in individual and/or group formats.
IVH. Family education and support	3	Mental health disorders routinely, but informally incorporated into family education or support sessions. Available as needed.
IVI. Specialized interventions to facilitate use of peer support groups in planning or during Treatment	3	Generic format on site, but no specific or intentional facilitation based on mental health disorders. More routine facilitation to addiction peer support groups (e.g., AA, NA).
IVJ. Availability of peer recovery supports for patients with co-occurring disorders.	3	Off site and facilitated with contact persons or informal matching with peer supports in the community, some co-occurring focus
Sum Total	30	
Sum total/number of elements(10)=SCORE	3	
V. Continuity of Care		
VA. Co-occurring disorders addressed in discharge	2	Variably addressed by individual clinicians

planning process.		
VB. Capacity to maintain treatment continuity.	2	No formal protocol to manage mental health needs once program is completed, but some individual clinicians may provide extended care until appropriate linkage takes place. Variable documentation
VC. Focus on ongoing recovery issues for both disorders.	2	Individual clinician determined
VD. Specialized interventions to facilitate use of community-based peer support groups during discharge planning.	3	Generic, but no specific or intentional facilitation based on mental health disorders. More routine facilitation to addiction peer support groups (e.g., AA, NA) upon discharge
VE. Sufficient supply and compliance plan for medications is documented.	2	Variable or undocumented availability of 30-day or supply to next appointment off-site
Sum Total	12	
Sum total/number of elements(5)=SCORE	2.4	
VI. Staffing		
VIA. Psychiatrist or other physician or prescriber of psychotropic medications.	5	Staff member, present on site for clinical, supervision, treatment team, and/or administration
VIB. On-site clinical staff members with mental health licensure (doctoral or masters level), or competency or substantive experience.	3	25-33% of clinical staff have either a license in a mental health profession or substantial experience sufficient to establish competence in mental health treatment
VIC . Access to mental health clinical supervision or consultation.	4	Routinely provided on site by staff member.

VID. Case review, staffing or utilization review procedures emphasize and support co-occurring disorder treatment.	1	Not conducted
VIE. Peer/Alumni supports are available with co-ccurring disorders.	4	Available on site, with co-occurring disorders, either as paid staff, volunteers, or program alumni. Variable referrals made
Sum Total	17	
Sum total/number of elements(5)=SCORE	3.4	
VII. Training		
VIIA. All staff members have basic training in attitude towards consumers, dual diagnosis prevalence, common signs and symptoms, detection and triage for co-occurring disorders.	2	Variably trained, no systematic agency training plan or individual staff member training (1-24% of clinical staff trained)
VIIB. Clinical staff members have advanced specialized training in integrated psychosocial or pharmacological treatment of persons with co-occurring disorders.	2	Variably trained, no systematic agency training plan or individual staff member training (1-24% of clinical staff trained)
Sum Total	4	
Sum total/number of elements(2)=SCORE	2	

DDCAT Index Program Category:

Scale Method

OVERALL SCORE 21

(Sum of Scale Scores/number of domains (7) = 3

Table 5: CAARE's DDC Capability in each category.

DUAL DIAGNOSIS CAPABILITY:	
AOS (1 - 1.99)	None
AOS/DDC (2 - 2.99)	Training (2), Clinical Assessment (2.7), Continuity of Care (2.7)
DDC (3 - 3.49)	Program milieu (3), Clinical Process/Treatment (3), Staffing (3.4)
DDC/DDE (3.5 - 4.49)	None
DDE (4.5 - 5.0)	Program Structure (4.5)

DDCAT Index Program Category: 3

CHAPTER 10: DISCUSSION OF FINDINGS

The elements in each domain that scored below 3 were categorized as meeting the highest priority to reach DDC level. This means that the agency is not performing at the "capacity" level and recommendations will be made to reach the DDC status. Elements in each domain that scored above 3 were categorized as meeting the lowest priority to reach DDC level. This means that the agency is already performing at the "capacity" level and no recommendations are needed to reach DDC status. Similarly, the domains that scored below 3 were categorized as having the highest priority to reach DDC level, while the domains that scored 3 or greater were categorized as meeting the lowest priority to reach DDC level.

Program Structure

Program structure scored a sum total of 17 and a DDCAT index score of 4.5. The DDCAT index score of 4.5 indicates that program structure is DDC and can achieve DDE. There were no elements in program structure with the highest priority to reach DDC level. All elements scored above a 3 with some elements scoring at a DDE level. Organizational certification and financial incentives being the lowest priority to meet dual diagnosis capability; both elements scored 5. Elements of primary focus of agency as stated in the mission statement and coordination and collaboration with mental health services had the highest priority to meet dual diagnosis enhanced care scoring 4 and 3.

Program Milieu

Program Milieu had a sum total of 6 with a DDCAT index score of 3. The DDCAT index score of 3 indicates that program milieu is DDC and can achieve DDE. There were no elements in

program milieu with the highest priority to reach DDC level. Both elements: routine expectation of and welcome to treatment for both disorders scored 3 indicating DDC levels.

Clinical Process: Assessment

Clinical Process: Assessment had a sum total of 19 and a DDCAT index score of 2.7 indicating AOS/DDC. Elements in program milieu of highest priority to achieve DDC were mental health and substance use diagnoses made and documented, and stage wise assessment completed. All other elements were at DDC or DDE levels.

Clinical Process: Treatment

Clinical Process: Treatment had a sum total of 30 with a DDCAT index score of 3 indicating DDC. Elements with highest priority to achieve DDC was assessing and monitoring interactive courses of both disorders. All other elements scored at DDC or DDE levels.

Continuity of Care

Continuity of Care had a sum total of 12 with a DDCAT index score of 2.4 indicating AOS/DDC level. Elements in continuity of care of highest priority to achieve DDC were co-occurring disorders addressed in discharge planning process, capacity to maintain treatment continuity, focus on ongoing recovery issues for both disorders; sufficient supply and compliance plan for medications is documented. All other elements were DDC.

Staffing

Staffing had a sum total of 17 and a DDCAT index score of 3.4 indicating DDC level. Elements of highest priority to achieve DDC in staffing was case review, staffing or utilization review procedures emphasize and support co-occurring disorder treatment. All other elements in staffing were DDC or DDE.

Training

Training had a sum total of 4 with a DDCAT index score of 2 indicating AOS/DDC level. All elements in training have highest priority to achieve DDC: all staff members have basic training in attitudes, prevalence, common signs and symptoms, detection and triage for co-occurring disorders, and clinical staff members have specialized training in integrated psychosocial or pharmacological treatment of persons with co-occurring disorders.

Overall the program evaluation revealed that the agency's DDCAT Index Program Category is dual diagnosis capable given the overall score of 3. Programs that score between 3-3.49 are dual diagnosis capable.

Each of the domains assessed scored differently indicating DDC or DDE. There was no domain that scored at the AOS level. Overall the DDCAT domains that required the most improvement for endorsement for dual diagnosis capability were clinical process: assessments, training and continuity of care, while program structure had the lowest priority for dual diagnosis capability. The program scored 3 on 80% of the elements on the toolkit.

Table 6: Areas that can be targeted by CAARE, Inc. for enhancement (DDC) and recommendations for attaining enhance services.

Areas for Enhancement	**Recommendations**
Clinical: Assessment IIIG. Assess patients' stage of change for both their substance use and mental health problems.	Clinicians may use well established measures such as the URICA, Socrates measures to assess patients' stage of change, or treatment motivation. A patient's global rating scale of pre-contemplation, contemplation, preparation, action and maintenance should be included in the medical record. The agency was provided the URICA and Socrates measures standardized forms with instructions on how to use the forms.
Treatment IVB. Observe and document changes in mental health and substance use symptoms over time.	Clinicians or patient use of time line follow-back (TLFB) calendars to observe and document changes in mental health and substance use symptoms. The agency was provided the time line follow-back (TLFB) calendars with instructions on how to use the forms.
Continuity of Care VA. Implement discharge procedures that plan for	Develop admission and discharge criteria and set up referral procedure. Agency provided

mental health and substance use services. VB. Assertively link patients to peer support groups welcoming to COD upon discharge VC. Focus on ongoing recovery from both disorders.	with SAMHSA's Illness Management and Recovery strategy EBP-kit to create agency admission and discharge criteria and set up referral procedure.
Staffing VID Case review, staffing or utilization review procedures emphasize and support co-occurring disorder treatment.	Implement routine case reviews that support co-occurring disorder treatment.
Training VII Implement training plan that routinely includes basic training on co-occurring disorders	Develop minimum core competencies for each clinician, in accordance with job role, level of training or license to provide properly matched integrated service to individuals in their system. The agency was provided the core clinical competency training required for each clinician in accordance to their specified job.

CHAPTER 11: OUTCOMES/END PRODUCTS/DELIVERABLES

At the end of the site visit, the agency director and staff members received preliminary verbal feedback. Following the formal analysis of results, the agency received final feedback in two formats: (1) an oral presentation to discuss the findings, recommendations, and agency response, and (2) a written report. The written report included a communication of appreciation, a review of what programs and sources of data were assessed, a summary of the agencies scores, including their categorical rating of AOS, DDC, or DDE (See Table 5), an acknowledgment of relative strengths in existing services, and recommendations of potential areas that can be targeted for enhancement (See Table 6).

Agency Response to Recommendations

The agency director and staff members received the results of the evaluation positively. They were excited that the agency substance abuse and mental health programs received an overall score at the dual diagnosis capable level. The agency director and staff engaged in a constructive dialogue as the report was presented and discussed preliminary strategies for following the recommendations to enhance the elements that had not scored in the dual diagnosis capable level. They stated that they were willing to develop policy and system changes to formally implement these recommendations.

Summary

Overall the DDCAT score for the agency was 3 and over 80% of the domains evaluated scored in the dual diagnosis capable category. The domains that met higher priority to meet dual diagnosis capability had seven elements that needed meaningful improvements. The agency

could enhance the quality of its services in a relatively short amount of time by implementing the outlined recommendations given that there were only seven elements out of thirty five elements that needed enhancement. The agency reported their intent to achieve DDE category, they would benefit from further training and technical assistance to help them achieve DDE category.

Conclusion

The program evaluation revealed that the DDCAT index is a valuable tool to evaluate the relative strengths and challenges of a community based agency regarding capability to provide integrative services for dual diagnosed patients. In addition, the DDCAT index can be used to guide efforts to improve services in community based agencies that treat dual diagnosed individuals, thus enhancing their ability to facilitate better treatment outcomes.

In the beginning of the evaluation, the agency was not aware what category of service they provided. The results of the evaluation will enable the agency to report in their mission statement that the agency is DDC, which should help generate more funding. The continual use of the DDCAT index will enable administrators and providers enhance the quality of care and efficiency of their agencies to serve the dual diagnosed.

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